Alberta
OCCUPATIONAL HEALTH AND SAFETY

REPORT

LOST-TIME CLAIMS and CLAIM RATES

1991 SUMMARY

LOST-TIME CLAIMS AND CLAIM RATES

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Research and Information Development
Planning and Research Branch
Alberta Occupational Health and Safety

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HIGHLIGHTS

- The Alberta lost-time injury rate declined by 12% in 1991, to 4.38, compared to 4.97 in 1990. This is the lowest value ever reported for Alberta.

- Risk of injury declined in all major industry sectors. The largest declines occurred in: Construction (-22%), Oil Gas and Mines (-16%), Forestry (-15%), and Manufacturing (-14%).

- The three highest risk industry sectors continue to be Forestry, Construction, and Manufacturing.

- The highest risk sub-industries continue to be; meat and poultry packing (19.3), geo-seismic exploration (12.9), trucking (12.7), and metal fabrication (12.1).

- Sub-industries with considerably lower risk, compared to 1990, were: glass and windows (-39%), flooring installation (-29%), sheet metal (-28%), geo-seismic exploration (-27%), well service with rigs (-26%), meat and poultry packing (-24%), and wood and building products (-24%).

- The most frequent types of accident were overexertion (29%), bodily reaction (15%), and being struck by objects (10%).

- The back was the most frequently injured part of body (29%).

- The most frequent type of injury was sprains and strains (49%).

- 21% of injured workers were between 15 and 24 years old. 24% had less than 6 months experience with their employer.

- 34% of injuries resulted in from 1 to 5 lost work days. 19% resulted in more than 50 lost work days.

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LOST-TIME CLAIMS AND CLAIM RATES
1991 SUMMARY

1. INTRODUCTION

This report is a statistical summary of occupational injury and illness in Alberta. Estimations of the risk of injury or illness (the lost-time claim rates) in Alberta industries are reported, as well as statistical information regarding the injuries, the injury incident, and the injured workers. The report is intended as a general reference; more detailed information about specific industries, injuries, or incident types can be obtained from Research and Information Development, Alberta Occupational Health and Safety (Telephone: 403-427-8943).

This report summarizes lost-time claims submitted to and accepted by the Workers' Compensation Board (WCB) in 1991, along with estimated person-years worked and lost-time claim rates. Changes from 1990 figures are indicated. Claim rates for the whole province are described first, followed by information on the major industry groups and sub-industries.

Also included is a general description of lost-time claims in 1991. These claims are described in terms of (a) source of injury, (b) type of accident, (c) nature of injury, (d) part of body injured, (e) age and experience of injured workers, and (f) duration of disability.

2. PROVINCIAL TOTALS

The number of lost-time claims decreased by 13.3% in 1991, while the estimated person-years worked decreased by 1.6%; the result was an 11.9% decrease in the lost-time claim rate in 1991 compared to 1990.

The following points summarize the lost-time claims and claim rates for the whole province for 1991 (see Table 2.1).

a) The estimated person-years worked in 1991 **decreased** by 1.6%.

b) The number of employer WCB accounts **decreased** by 2.7%.

c) The number of lost-time claims **decreased** by 13.3%.

d) The lost-time claim rate (per 100 person-years) was 4.38, down about 12% from 1990.

The lost-time claim rate has been declining gradually since 1985, when the rate was 5.54 lost-time claims per 100 person-years. In 1991 the lost-time claim rate was the lowest ever recorded in Alberta.

TABLE 2.1

ESTIMATED PERSON-YEARS WORKED, EMPLOYER ACCOUNTS, LOST-TIME CLAIMS, AND LOST-TIME CLAIM RATES ALBERTA, 1990 - 1991

	1990	1991	Change
Estimated Person-Years[1,2]	874525	860352	-1.6%
Employer Accounts[3]	63818	62078	-2.7%
Lost-Time Claims[1,2]	43470	37688	-13.3%
Lost-Time Claim Rate[4]	4.97	4.38	-11.9%

Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Estimated person-years worked and lost-time claims for the Government of Canada are not included in these totals.

3 Accounts reporting assessable payroll to the WCB.

4 Claim rate = $\frac{\text{Lost-time claims x 100}}{\text{Estimated Person-years}}$

Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

3. MAJOR INDUSTRY SECTORS

Estimated person-years worked, number of lost-time claims, and lost-time claim rates for major industry sectors for 1990 and 1991 are contained in Table 3.1 and in Figure 1 and Figure 2.

a. **The person-years worked** estimates declined in several major industry sectors. The largest percent decreases occurred in construction (-11.3%) and manufacturing (-3.9%). Person-year estimates increased in the forestry sector (+9.1%) and agriculture (+8.5%).

b. **Lost-time claims** decreased in all industry sectors. The largest percentage decreases were in construction (-31.3%), oil gas and mines (-18.7%), and manufacturing (-16.9%).

c. **Lost-time claim rates** in all major industry sectors declined in 1991 compared to 1990. The largest declines were in construction (-22%), forestry (-15%), oil, gas and mines (-16%), and manufacturing (-14%).

Each major industry sector consists of a wide variety of industries having a wide range of health and safety risks. For example, the oil, gas, and mines sector includes both the high hazard drilling, exploration, and servicing industries, and the low hazard operation and processing industries. The claim rates for sub-industries within each of the major sectors are described in the next section of this report.

TABLE 3.1

ESTIMATED PERSON-YEARS, LOST-TIME CLAIMS, AND LOST-TIME CLAIM RATES FOR MAJOR INDUSTRY SECTORS ALBERTA, 1990 - 1991

	1990	1991	Change
Forestry (Primary)			
Person-Years[1]	1814	1979	+9.1%
Lost-Time Claims[1]	248	232	-6.5%
Lost-Time Claim Rate[2]	13.7	11.7	-15%
Construction			
Person-Years	71384	63296	-11.3%
Lost-Time Claims	7025	4841	-31.1%
Lost-Time Claim Rate	9.8	7.6	-22%
Manufacturing			
Person-Years	111370	107072	-3.9%
Lost-Time Claims	9581	7961	-16.9%
Lost-Time Claim Rate	8.6	7.4	-14%
Agriculture			
Person-Years[1]	5189	5632	+8.5%
Lost-Time Claims[1]	424	415	-2.1%
Lost-Time Claim Rate	8.2	7.4	-10%
Transportation and Utilities			
Person-Years	78520	76952	-2.0%
Lost-Time Claims	4241	3826	-9.8%
Lost-Time Claim Rate	5.4	5.0	-7%
Trade			
Person-Years	166469	167923	+0.9%
Lost-Time Claims	7555	6921	-8.4%
Lost-Time Claim Rate	4.5	4.1	-9%
Public Administration[3]			
Person-Years	78338	76782	-2.0%
Lost-Time Claims	3119	2857	-8.4%
Lost-Time Claim Rate	4.0	3.7	-7%

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	1990	1991	Change
Service			
Person-Years	290949	291378	+0.1%
Lost-Time Claims	9595	9273	-3.4%
Lost-Time Claim Rate	3.3	3.2	-3%
Oil, Gas and Mines			
Person-Years	65861	64502	-2.1%
Lost-Time Claims	1665	1344	-18.7%
Lost-Time Claim Rate	2.5	2.1	-16%

Notes:

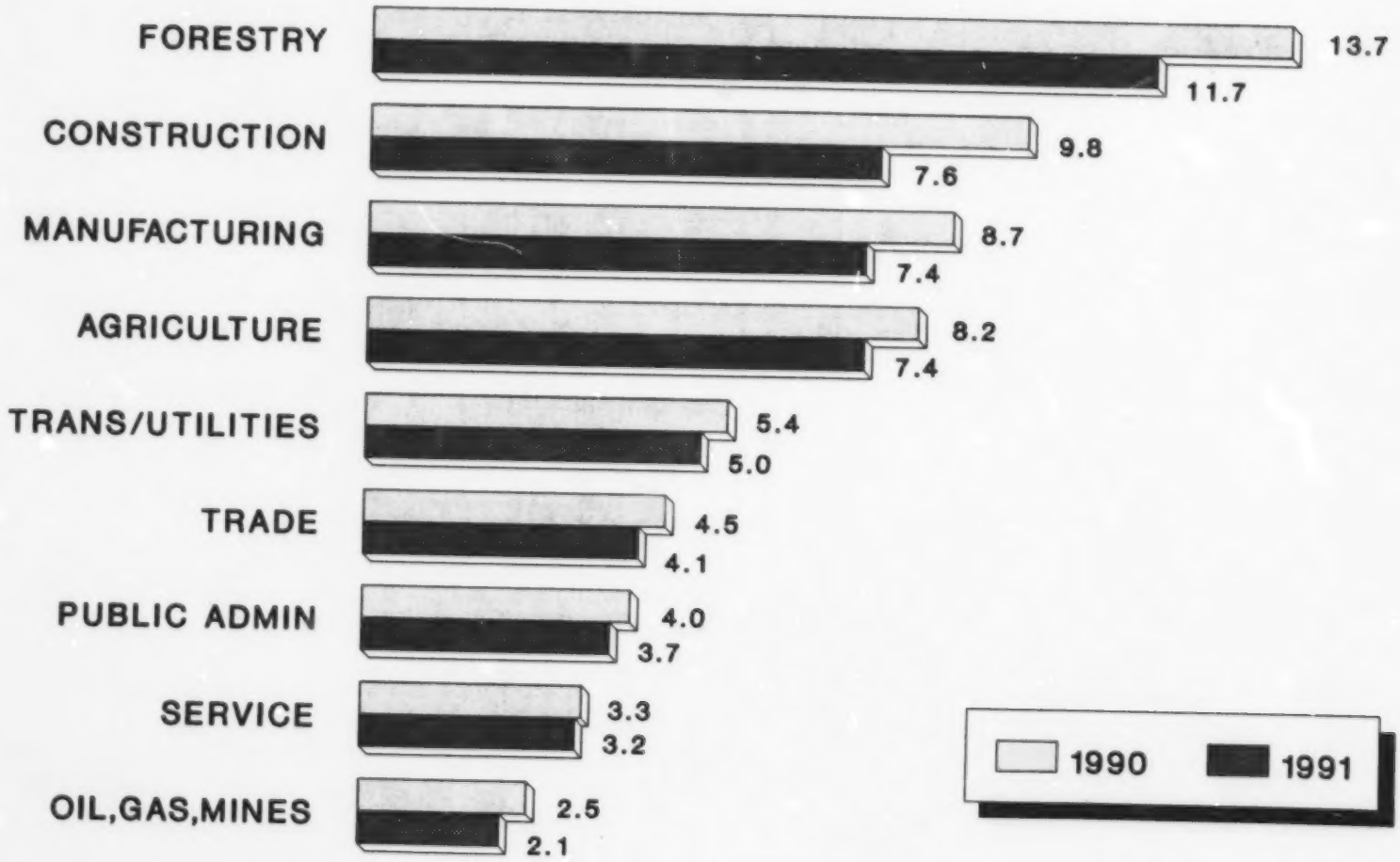
1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury. Estimates are based only on information about employers with WCB coverage. Only a small percentage of some industry sectors (for example, agriculture) have WCB coverage (see also Table 6.1).

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Estimated Person-years}} \times 100$

3 Estimated person-years worked and lost-time claims for the Government of Canada are not included in these totals. Person-year estimates for the Government of Alberta are based upon information from the Personnel Administration Office.

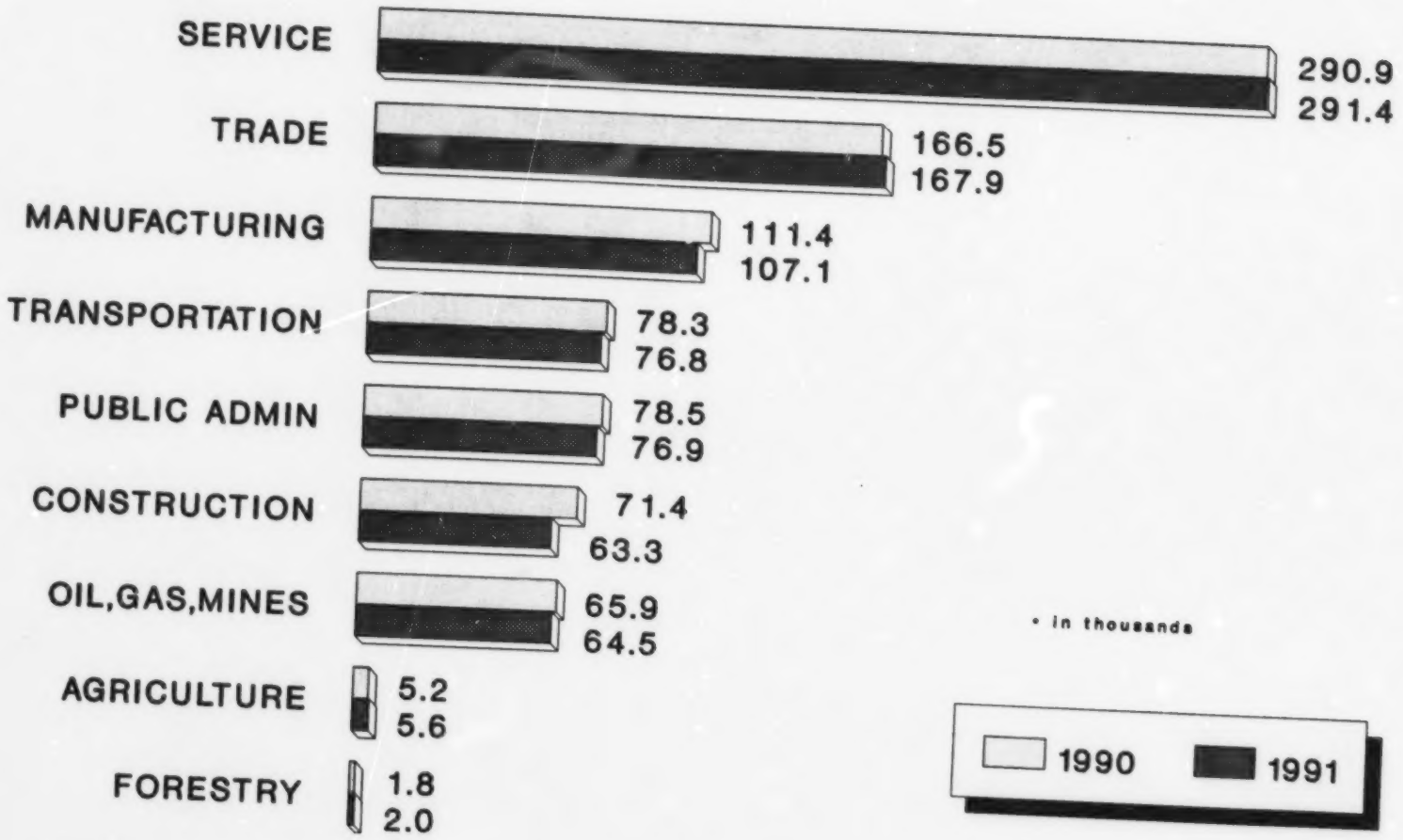
Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

FIGURE 1: LOST-TIME CLAIM RATES
MAJOR INDUSTRIAL SECTORS
ALBERTA, 1990-1991



SOURCE: RESEARCH AND INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH AND SAFETY

FIGURE 2: ESTIMATED PERSON-YEARS * MAJOR INDUSTRIAL SECTORS ALBERTA, 1990-1991



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
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4. PERSON-YEAR ESTIMATES AND CLAIM RATES BY DETAILED INDUSTRY

Tables 4.1 to 4.7 contain person-year estimates and lost-time claim rates for selected sub-industries within the larger industry sectors listed in Table 3.1. The sub-industries selected for inclusion into these tables were chosen because (a) they represent a sizable portion of the industry sector, in terms of person-years worked, and (b) they illustrate the range of industries, and the corresponding range of lost-time claim rates, which are included within an industry sector.

4.1 Primary Resource

Very large differences in lost-time claim rates occurred between selected sub-industries within this industry group. Claim rates were high in exploration and logging, moderate in drilling, and well servicing, and low in the operation and processing industries (see Table 4.1 and Figure 3). Coal mining and the tar sands had relatively low lost-time claim rates.

1990 versus 1991

a) Person-year estimates: Person-year estimates decreased slightly in most primary resource industries. The only large decrease in employment occurred in oil and gas well drilling (-10%). Logging activity increased slightly (6%).

b) Lost-time claim rates: Lost-time claim rates decreased or remained unchanged in all sub-industries. The largest change occurred in oil and gas exploration (from 17.6 to 12.9; a 27% decline). Lost-time claim rates in drilling and well servicing continued the downward trend begun in 1988.

4.2 Manufacturing

The meat and poultry packing industry again had the highest claim rate in this sector (19.3), but has improved considerably over the 1990 rate of 25.4. There were relatively high claim rates as well in the fabrication and manufacture of metal products industry, the food and beverage industry, and the wood products industry. Low claim rates occurred in printing and publishing, and in the petro-chemical industries (see Table 4.2 and Figure 4).

1990 versus 1991

a) Person-year estimates: Person-year estimates decreased in most manufacturing industries, with the greatest decreases occurring in petro-chemical (-14%), and meat and poultry packing (-13%).

b) Lost-time claim rates: Lost-time claim rates in 1991 decreased in most manufacturing industries. The greatest improvements were in meat and poultry packing (-6.1), wood and building products (-2.5), metal products (-2.1) and non-metallic minerals (-2.1).

4.3 Construction

Among the major construction industry groups, the highest claim rate in 1990 was for construction of buildings (7.8), followed closely by construction trades (7.6). The lowest rate was for construction of roads and bridges (6.3). Among the special trades, roofing, sheet metal, concrete, and drywall construction trades had the highest lost-time claim rates (see Table 4.3 and Figures 5 and 6).

1990 versus 1991

a) Person-year estimates: Person-year estimates decreased for the construction of buildings (-14%), and construction trades (-12%).

b) Lost-time claim rates: The lost-time claim rates in the construction industries have declined substantially in every major group. Claim rates declined in several special trades; particularly large decreases occurred in sheet metal (-5.1) and roofing (-2.5).

4.4 Trade

The trade industry includes small retail stores (e.g., jewellery stores) with very low lost-time claim rates (1.7) and the automobile repair industry, with a claim rate of 5.3. Food stores had the highest claim rate in the trade sector (7.0 in 1991; see Table 4.4 and Figure 7).

1990 versus 1991

a) Person-year estimates: Person-year estimates declined in most trade sub-industries. The only increases occurred in machine sales and service (+6%) and food stores (see note 3 to Table 4.4).

b) Lost-time claim rates: Claim rates decreased in all trade sub-industries, especially in food stores (from 9.1 to 7.0); and warehouse/wholesale (from 4.6 to 3.5). These changes, however, can be accounted for in part by the re-classification of several large employers within the WCB assessment system.

4.5 Transportation and Utilities

The trucking industry was the major source of lost-time claims in this sector, and has the highest lost-time claim rate (12.7). Within this sector, air transportation services had a moderate claim rate, and the claim rates within the railway, utilities and communications industries were quite low (see Table 4.5 and Figure 8).

1990 versus 1991

a) Person-year estimates: The largest increases in activity were evident in pipeline operations (+14%), while there was a 12% decrease in railways, and a 7% decrease in radio and television.

b) Lost-time claim rates: The lost-time claim rates decreased or remained unchanged in most sub-industries in this sector in 1991 compared to 1990 levels. The largest decreases were in trucking (from 14.3 to 12.7) and in gas distribution (from 2.1 to 1.6).

4.6 Service

Claim rates for all sub-industries in this sector were relatively low; the care of the young, old, and infirm had the highest claim rate in this sector (4.9). Low rates in this industry sector occurred in the education (1.7) and engineering (0.9) industries (see Table 4.6 and Figure 9).

1990 versus 1991

a) Person-year estimates: Person-year estimates for several sub-industries increased in 1991; engineering increased 10%, and care of young, old and infirm increased 3%. Small decreases occurred in hospitals (-4.0%) and hotels/restaurants (-3%).

b) Lost-time claim rates: Lost-time claim rates in the service sub-industries changed only by small amounts in 1991 compared to 1990 levels. LTC rates increased in building services and personal services, and decreased in care of young old and infirm, hotels and restaurants, business services, and engineering.

4.7 Public Administration

Sub-industries in this sector include the provincial government, provincial boards and agencies, and the various levels of local government. Claim rates in these sub-industries are generally near or below the provincial average.

1990 versus 1991

a) Person-year estimates: There were very few changes in 1991; local governments tended to increase slightly, while there was a decrease in the provincial government.

b) Lost-time claim rates: Claim rates in this sector decreased in the cities (from 6.1 to 5.7), and in counties and municipalities (from 5.2 to 5.4). The lost-time claim rate for the provincial government decreased from 2.6 to 2.4 lost-time claims per 100 person-years.

TABLE 4.1

ESTIMATED PERSON-YEARS AND CLAIM RATES
PRIMARY RESOURCE SUB-INDUSTRIES
ALBERTA, 1990 - 1991

	Person Years[1]		Claim Rate[2]	
Industry	1990	1991	1990	1991
Oil and gas exploration	1697	1586	17.6	12.9
Logging	1523	1607	12.0	10.0
Well servicing	2513	2491	7.7	5.7
Well drilling	3687	3307	5.5	5.0
Other oilfield services	10589	10281	5.5	4.7
Coal mining	2979	2930	3.2	2.6
Tar sands	7268	7025	1.2	1.3
Operation of gas plants and oil wells	36371	36085	0.4	0.4

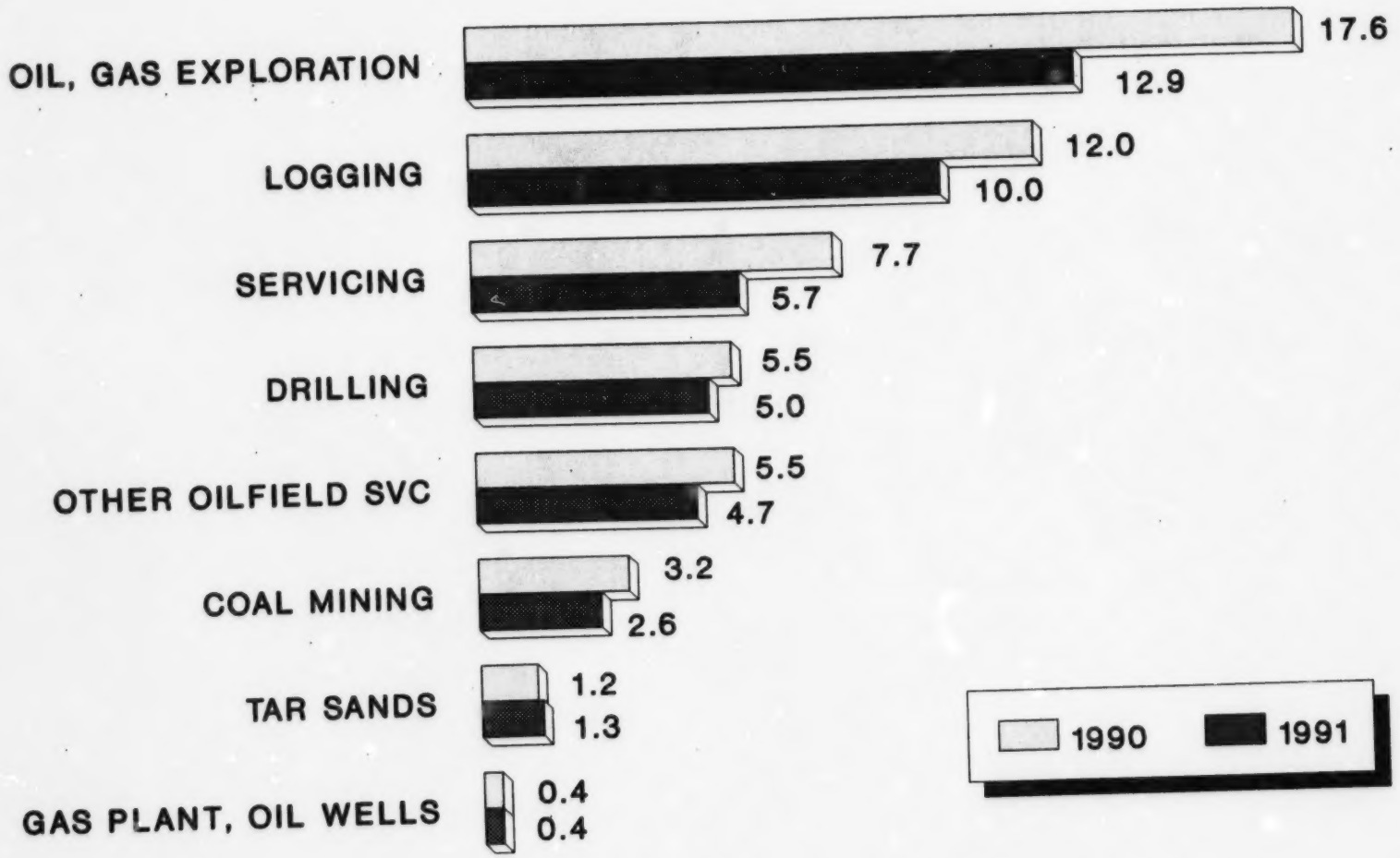
Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

FIGURE 3: CLAIM RATES
PRIMARY RESOURCE SUB-INDUSTRIES
ALBERTA, 1990-1991
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY

TABLE 4.2

ESTIMATED PERSON-YEARS AND CLAIM RATES MANUFACTURING SUB-INDUSTRIES ALBERTA, 1990 - 1991

	Person Years[1]		Claim Rate[2]	
Industry	1990	1991	1990	1991
Meat and poultry packing	5887	5106	25.4	19.3
Metal products	23442	23361	14.2	12.1
Food and beverage	11191	10838	10.0	9.9
Wood and building products	19313	19435	10.4	7.9
Non-metallic minerals	4104	3777	7.6	5.5
Printing and publishing	10937	10833	2.7	2.9
Petro-chemical	19174	16462	2.1	2.3

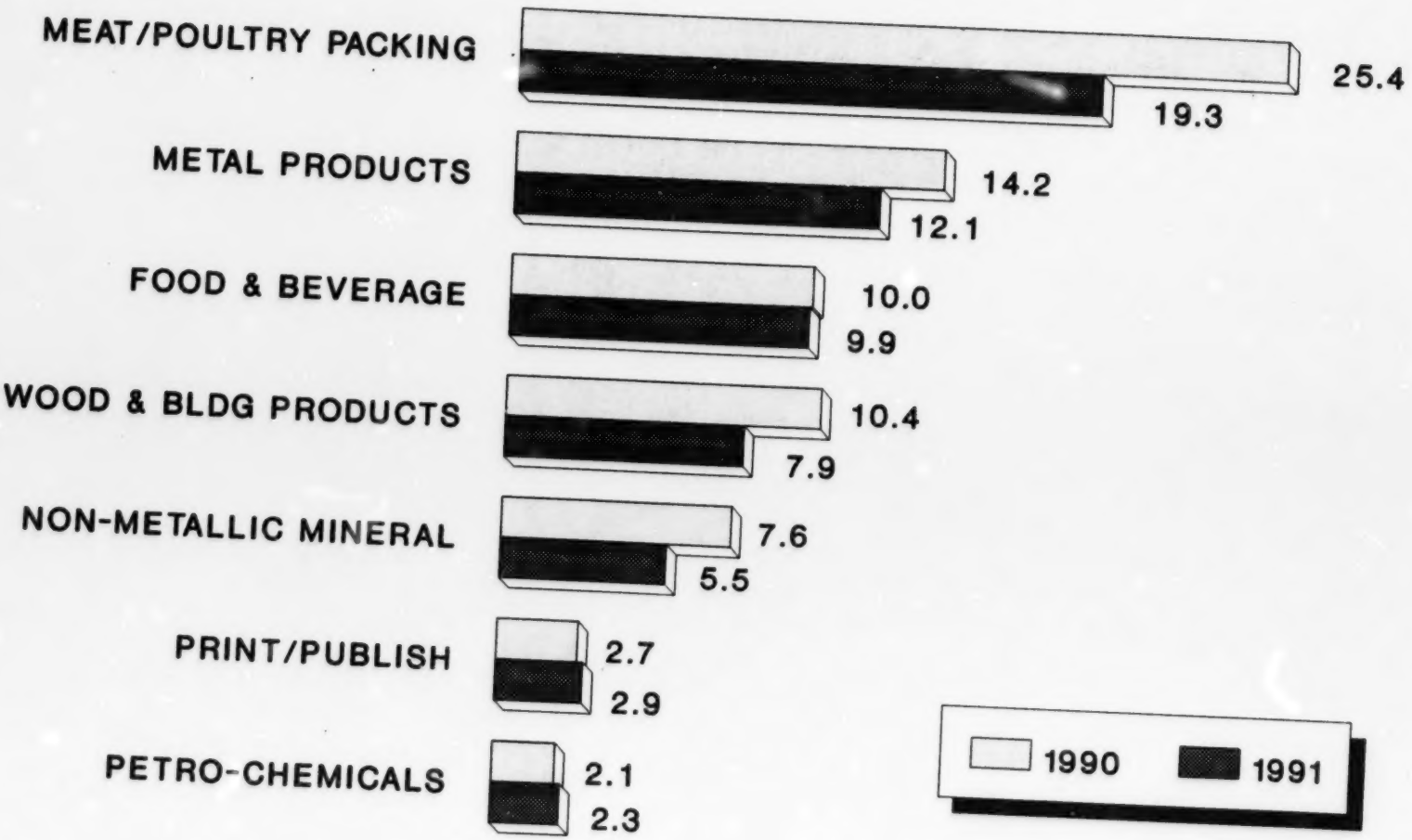
Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

FIGURE 4: CLAIM RATES
MANUFACTURING SUB-INDUSTRIES
ALBERTA, 1990-1991
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
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TABLE 4.3

ESTIMATED PERSON-YEARS AND CLAIM RATES CONSTRUCTION SUB-INDUSTRIES ALBERTA, 1990 - 1991

	Person Years[1]		Claim Rate[2]	
Industry	1990	1991	1990	1991
Buildings	19494	16762	10.2	7.8
Special trades	36806	32349	10.4	7.6
Roofing	1346	1386	18.3	15.8
Concrete	1430	1250	14.3	13.4
Sheet metal	1769	1415	18.3	13.2
Drywall	2702	2047	13.4	11.5
Plumbing	3521	2979	10.1	9.3
Painting	1992	1699	8.9	8.0
Glass, Windows	3647	3157	11.8	7.2
Flooring	1584	1576	9.5	6.7
Electrical	5779	5142	7.5	6.0
Utilities	2866	2824	7.6	7.0
Roads, bridges	12218	11362	8.1	6.3

Notes:

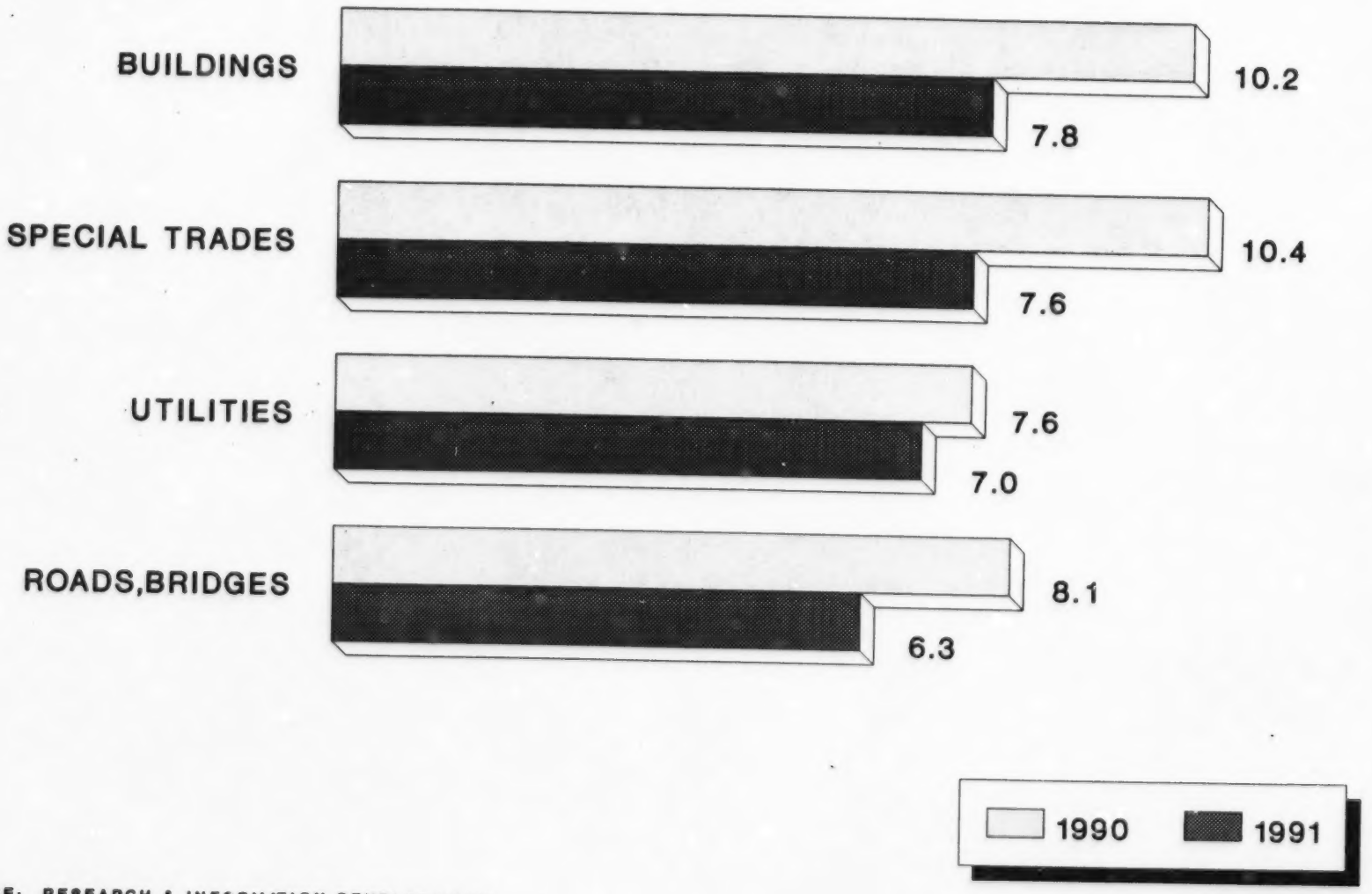
1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

FIGURE 5: CLAIM RATES
CONSTRUCTION SUB-INDUSTRIES
ALBERTA, 1990-1991

(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
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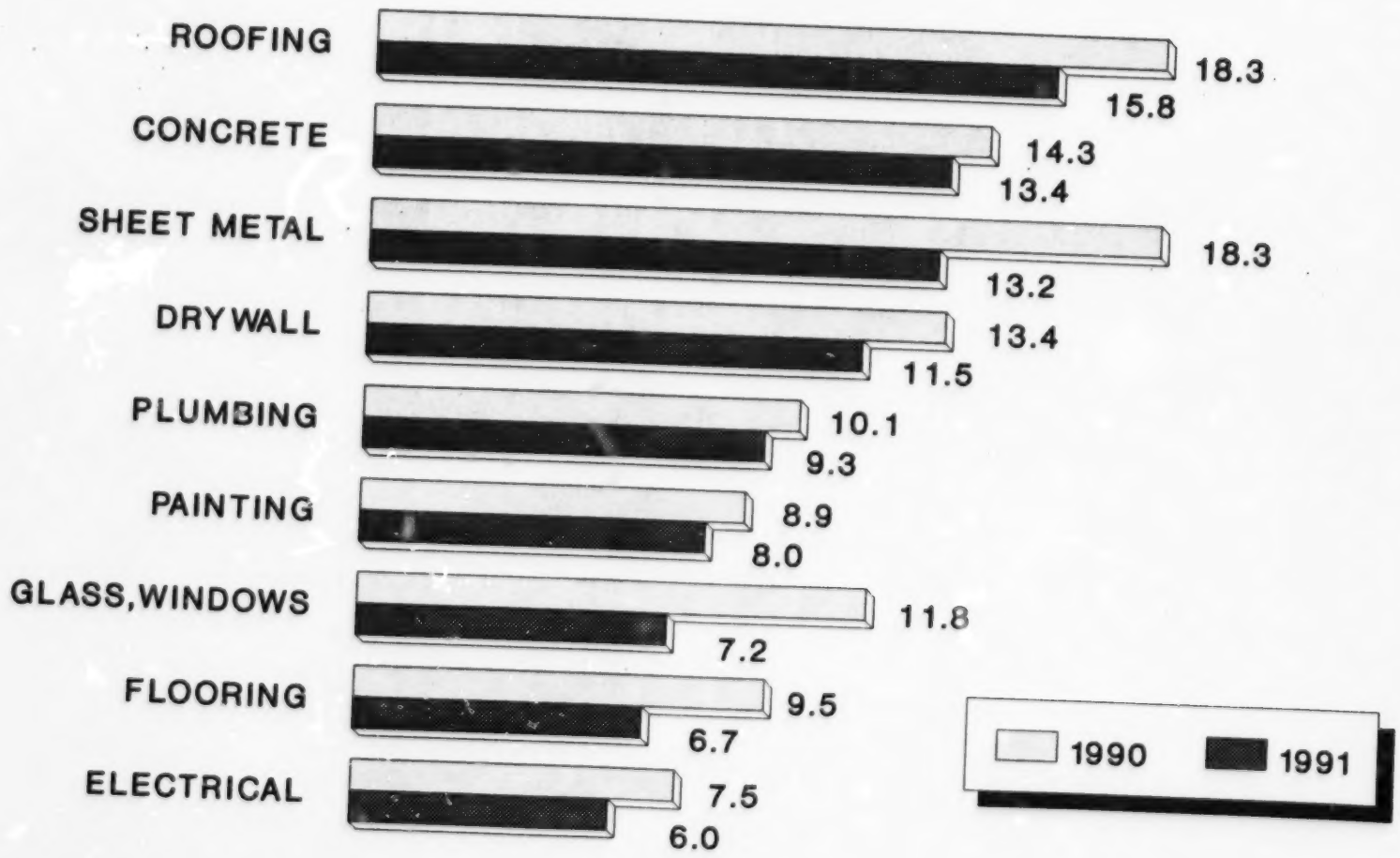
FIGURE 6: CLAIM RATES CONSTRUCTION SPECIAL TRADES ALBERTA, 1990-1991

(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
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TABLE 4.4

ESTIMATED PERSON-YEARS AND CLAIM RATES
TRADE SUB-INDUSTRIES
ALBERTA, 1990 - 1991

	Person Years[1]		Claim Rate[2]	
Industry	1990	1991	1990	1991
Food stores[3]	18314	31556	9.1	7.0
Automotive	30367	28981	5.8	5.3
Liquor stores	2425	2287	4.7	3.9
Department stores[3]	22165	15721	4.3	3.7
Warehouse, wholesale[3]	24592	22907	4.6	3.5
Furniture, appliances	6373	6222	3.5	2.8
Machine sales, service	11865	12543	2.7	2.3
Other retail	41744	38810	1.8	1.7

Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

3 The changes in these sub-industries are due in part to the re-classification of several large employers.

Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

FIGURE 7: CLAIM RATES
TRADE SUB-INDUSTRIES
ALBERTA, 1990-1991
(Rate/100 Person-Years)

SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY

TABLE 4.5

ESTIMATED PERSON-YEARS AND CLAIM RATES TRANSPORTATION AND UTILITIES SUB-INDUSTRIES ALBERTA, 1990 - 1991

	Person Years[1]		Claim Rate[2]	
Industry	1990	1991	1990	1991
Trucking	17918	18114	14.3	12.7
Air services	6186	6236	6.1	6.3
Gas distribution	3695	3711	2.1	1.6
Electric power	5063	4943	1.3	1.5
Telecommunications	14376	13356	1.3	1.4
Railways	10397	9164	1.5	1.3
Radio, television	3489	3252	1.6	1.2
Pipeline operation	7848	9090	1.2	1.0

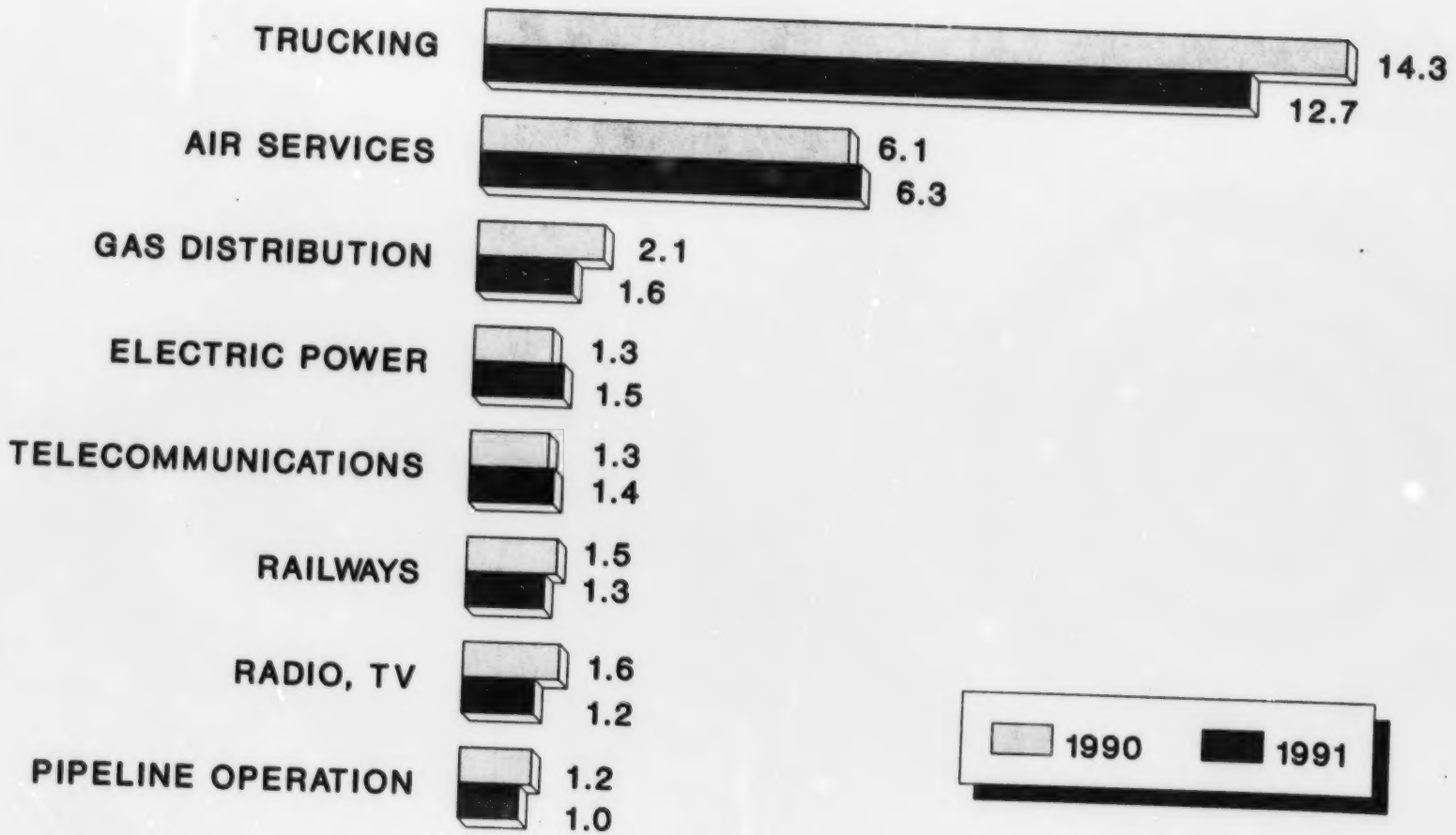
Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

FIGURE 8: CLAIM RATES
TRANSPORTATION AND UTILITIES SUB-INDUSTRIES
ALBERTA, 1990-1991
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY

TABLE 4.6

ESTIMATED PERSON-YEARS AND CLAIM RATES
SERVICE SUB-INDUSTRIES
ALBERTA, 1990 - 1991

	Person Years[1]		Claim Rate[2]	
Industry	1990	1991	1990	1991
Care of young, old, and infirm	24719	25394	5.3	4.9
Hospitals	54024	51828	4.0	4.2
Hotels, restaurants	68587	66238	4.1	3.8
Building maintenance	15134	15847	3.3	3.7
Personal services	7765	7778	2.9	3.2
Sports, entertainment	8147	7994	3.3	3.1
Business services	11820	11224	2.4	2.0
Education	53568	54554	1.7	1.7
Engineering	13569	14989	1.3	0.9

Notes:

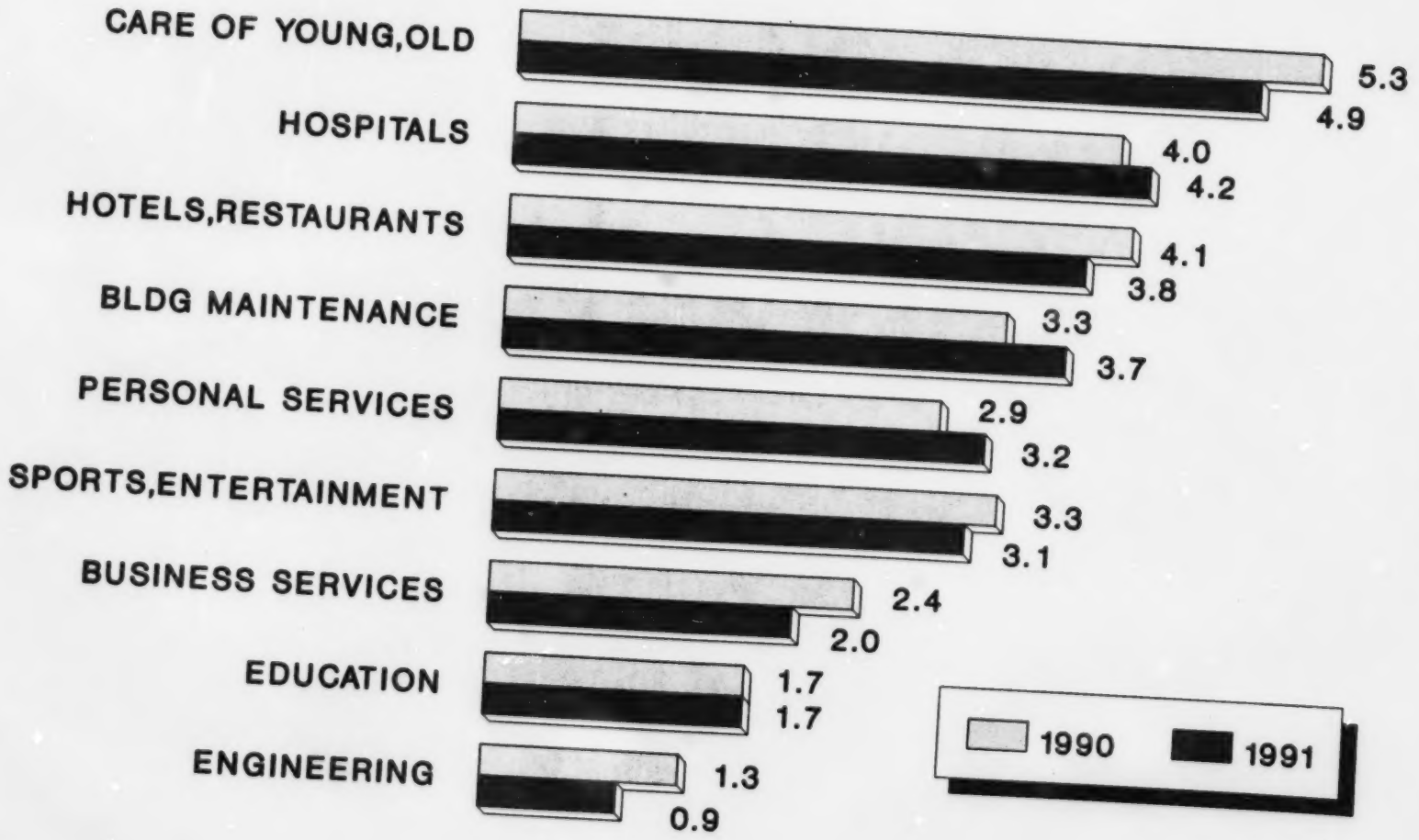
1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

FIGURE 9: CLAIM RATES SERVICE SUB-INDUSTRIES ALBERTA, 1990-1991

(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY

TABLE 4.7

ESTIMATED PERSON-YEARS AND CLAIM RATES PUBLIC ADMINISTRATION SUB-INDUSTRIES ALBERTA, 1990 - 1991

	Person Years[1]		Claim Rate[2]	
Industry	1990	1991	1990	1991
Cities	27122	27202	6.1	5.7
County, Municipality	3745	3766	5.2	5.4
Towns, villages	3877	3949	4.2	4.1
Alberta Government[3]	37693	36230	2.6	2.4
Other local government	1439	1805	2.6	0.9
Government boards and agencies	4289	3612	0.8	0.9

Notes:

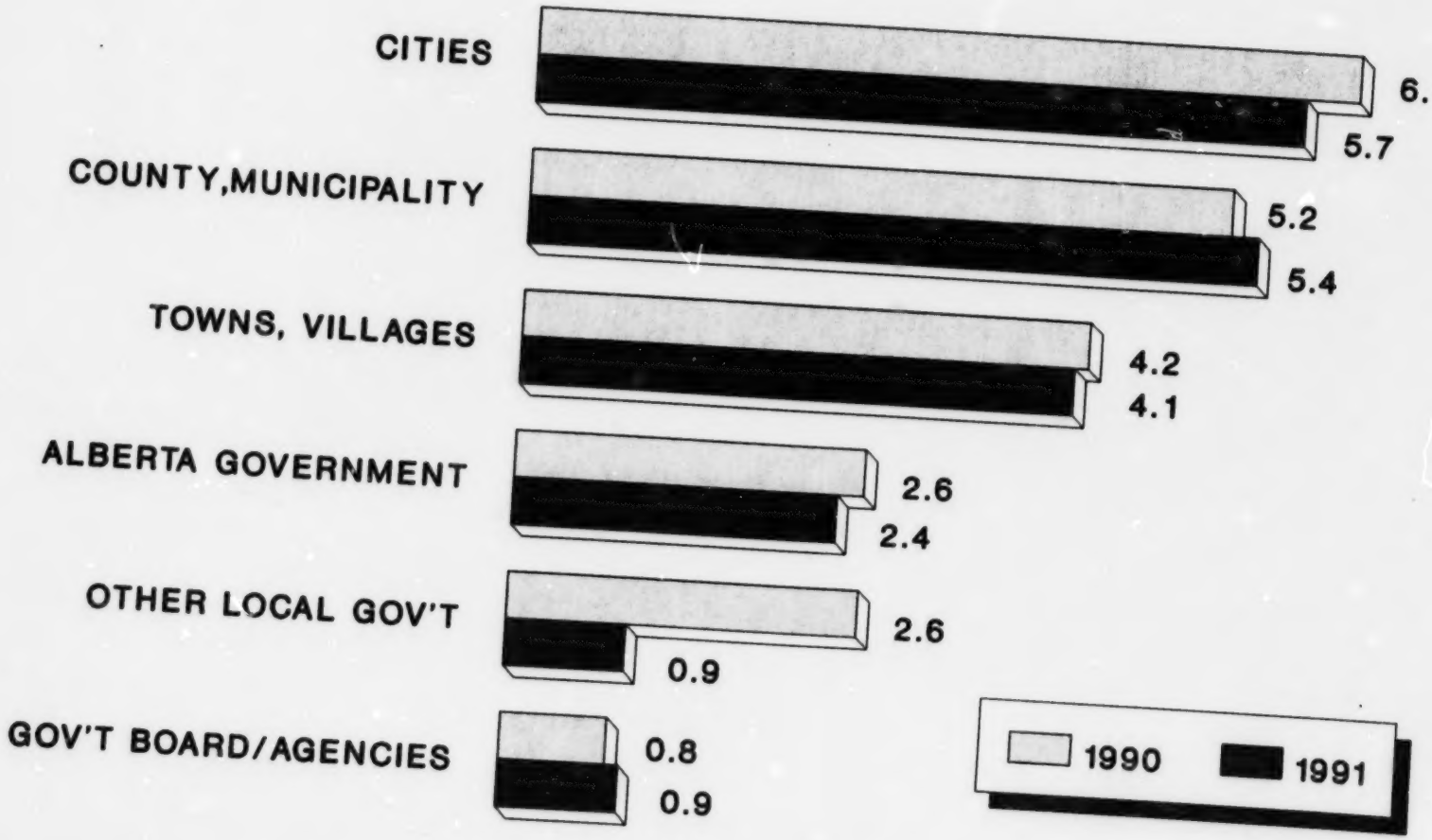
1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

3 Person-year estimates for Government of Alberta are based upon information from the Personnel Administration Office.

Source: Occupational Health and Safety Annual Injury Rate Report: 1990, 1991.

FIGURE 10 CLAIM RATES
PUBLIC ADMINISTRATION SUB-INDUSTRIES
ALBERTA, 1990-1991
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY

5. DESCRIPTION OF LOST-TIME CLAIMS; 1990, 1991

In this section, lost-time claims are described in terms of (a) source of injury, (b) type of accident, (c) nature of injury, and (d) part of body injured. The percent distribution of 1991 claims is compared with the distribution of claims in 1990.

In addition, some information regarding the age, sex, and experience of injured workers is included, as well as statistics on the duration of the disability (days compensation).

The total number of claims described in these tables is more than the total described in Table 2.1. This occurs because some claims (e.g. Government of Canada) are not used to calculate claim rates, but are included in the following tables.

5.1 Source of Injury

The four most frequent sources of injury in 1991 were *working surfaces* (12.1%), *bodily motion* (14.8%), *metal items* (9.7%), and *boxes and containers* (10.8%). accounting for almost half of all lost-time claims. The distribution of claims according to source of injury has changed very little since 1990 (see Table 5.1), except that injuries due to bodily motion have increased.

5.2 Accident Type

The three most frequent types of accidents in 1991 involved *overexertion* (29.3%), *bodily reaction* (14.8%), and *struck by* an object (10.3%). The distribution of claims according to accident type has changed very little in 1991 compared to 1990. (See Table 5.2).

5.3 Nature of Injury

Sprains and strains accounted for 49.2% of claims (up from 45.7% in 1990), followed by *bruises and crushing* (12.0%), and *cuts and lacerations* (9.7%). Occupational disease or illness continues to account for only a small proportion of lost-time claims. (See Table 5.3).

5.4 Part of Body

The most frequently injured body parts in 1991 were the back (29.0%), fingers (10.3%), other trunk (10.4%), and ankle or foot (8.6%). The distribution of lost-time claims by part of body injured changed very little between 1990 and 1991 (see Table 5.4).

5.5 Injured Worker Characteristics

Men accounted for 73% of lost-time claims in 1991, about 3% lower than in 1990. Conversely, there was a 3% increase in the proportion of claims by women in 1991.

In 1991 about 20% of claimants were young (15-24 years), down from 23% in 1990, and 36% were aged 25-34 (see Table 5.5). Changes from 1990 reflect a gradually aging labour force. Lost-time claim rates for different age groups show that the 20-24 year age group had the highest rate (4.2), followed by the 25-34 year age group (3.8). Note that these rates are based upon employment data from Statistics Canada, and not on AOHS person-years, and therefore cannot be compared directly with other claim rates in this report.

24% of injured workers had worked less than 6 months for their current employer, down from 29% in 1990, and 48% had worked for more than one year, up from 45% in 1990 (see Table 5.5). The risk of a work injury or illness during the first 6 months on the job is estimated to be twice the risk faced by experienced workers (those with more than 1 year on the job).

5.6 Days Lost

In 1991, 34% of claims were for 5 or fewer work days lost, and 15% were for between 6 and 10 days lost. Lengthy disabilities (more than 50 days lost) accounted for almost 19% of all lost-time claims in 1991. Compared to 1990, there were somewhat more long duration injuries and fewer short duration injuries reported to and accepted by the WCB in 1991. (See Table 5.6).

TABLE 5.1

LOST-TIME CLAIMS
SOURCE OF INJURY
ALBERTA, 1990 - 1991

	Number[1]		Percent	
Source	1990	1991	1990	1991
Bodily motion	5655	5732	12.7	14.8
Working surfaces	5330	4652	12.0	12.1
Boxes, containers	4424	4165	10.0	10.8
Metal items	4951	3735	11.1	9.7
Vehicles	3024	2669	6.8	6.9
Persons	1958	2002	4.4	5.2
Unpowered handtool	2263	1866	5.1	4.8
Machines	2016	1587	4.5	4.1
Furniture, fixtures	1399	1256	3.1	3.3
Wood items	1520	1096	3.4	2.8
Buildings, structures	766	690	1.7	1.8
Powered handtool	751	608	1.7	1.6
Chemicals	501	457	1.1	1.2
Ice, snow	378	444	0.9	1.2
Meat and food products	598	440	1.3	1.1
Electrical apparatus	472	417	1.1	1.1
Hoisting apparatus	395	334	0.9	0.9
Particles	331	334	0.7	0.9
Tire, rubber products	229	208	0.5	0.5
Water, liquids	224	203	0.5	0.5
Glass items	307	200	0.7	0.5
Boilers, pressure vessels	237	199	0.5	0.5
Animals, animal products	215	184	0.5	0.5
Mineral items	185	157	0.4	0.4
Flame, fire, smoke	194	152	0.4	0.4
Ladders	135	152	0.3	0.4
Mechanical power apparatus	253	150	0.6	0.4
Plants, trees	232	149	0.5	0.4
Radiation, electric arc	184	141	0.4	0.4
Coal, petroleum products	122	91	0.3	0.2
Conveyors	121	84	0.3	0.2
Other, unclassified	1805	1261	4.1	3.3
Unknown, not coded	3271	2786	7.4	7.2
TOTAL	44446	38601	100.0	100.0

Note:

1 Lost-time claims result in absence from work beyond the day of the injury.

Source: Research and Information Development, AOHS; June 1992.

TABLE 5.2

LOST-TIME CLAIMS
TYPE OF ACCIDENT
ALBERTA, 1990 - 1991

	Number[1]		Percent	
Type of Accident	1990	1991	1990	1991
Overexertion	12515	11307	28.2	29.3
Bodily reaction	5645	5718	12.7	14.8
Struck by	5123	3992	11.3	10.3
Fall on same level	3406	3161	7.7	8.2
Fall from elevation	3297	2813	7.4	7.3
Caught between	3198	2662	7.2	6.9
Rubbed, abraded	2634	2223	5.9	5.8
Struck against	2237	1822	5.0	4.7
Vehicle accident	1095	1048	2.5	2.7
Temperature extreme	998	901	2.2	2.3
Toxic substance	901	797	2.0	2.1
Violence	336	357	0.8	0.9
Noise Exposure	114	70	0.3	0.2
Explosions	91	68	0.2	0.2
Other, unknown	2856	1662	6.4	4.3
TOTAL	44446	38601	100.0	100.0

Note:

1 Lost-time claims result in absence from work beyond the day of the injury.

Source: Research and Information Development, AOHS; June 1992.

TABLE 5.3

LOST-TIME CLAIMS
NATURE OF INJURY
ALBERTA, 1990 - 1991

	Number[1]		Percent	
Nature of Injury	1990	1991	1990	1991
Sprain, strain	20295	18978	45.7	49.2
Bruise, crush	5026	4644	11.3	12.0
Cut, laceration	4454	3750	10.0	9.7
Dislocation, fracture	3183	2915	7.2	7.6
Multiple injury	2812	2064	6.3	5.3
Inflammation of joints, tendons	1911	1730	4.3	4.5
Scratch, abrasion	1515	1095	3.4	2.8
Burn, scald	979	876	2.2	2.3
Other injury	1208	869	2.7	2.3
Other disease	990	587	2.2	1.5
Nervous System disease	256	330	0.6	0.9
Chemical burn	345	303	0.8	0.8
Radiation	175	127	0.4	0.3
Non-personal damage	17	16	0.0	0.0
Unknown, not coded	1280	317	2.9	0.8
TOTAL	44446	38601	100.0	100.0

Note:

1 Lost-time claims result in absence from work beyond the day of the injury.

Source: Research and Information Development, AOHS; June 1992.

TABLE 5.4

LOST-TIME CLAIMS
PART OF BODY INJURED
ALBERTA, 1990 - 1991

	Number[1]		Percent	
Part of Body	1990	1991	1990	1991
Back	12486	11207	28.1	29.0
Other trunk	4504	4024	10.1	10.4
Fingers	5016	3978	11.3	10.3
Multiple parts	3790	3501	8.5	9.1
Ankle, foot	4059	3338	9.1	8.6
Wrist, hand	3531	3277	7.9	8.5
Leg	3464	3000	7.8	7.8
Arm	1905	1740	4.3	4.5
Eyes	1908	1469	4.3	3.8
Head, neck	1378	1221	3.1	3.2
Multiple upper	614	505	1.4	1.3
Toes	632	466	1.4	1.2
Face	338	301	0.8	0.8
Multiple lower	418	262	0.9	0.7
Respiratory system	147	147	0.3	0.4
Body systems	195	144	0.4	0.4
Other, unknown	64	21	0.1	0.1
TOTAL	44446	38601	100.0	100.0

Note:

1 Lost-time claims result in absence from work beyond the day of the injury.

Source: Research and Information Development; AOHS, June 1992.

TABLE 5.5

AGE AND EXPERIENCE OF INJURED WORKERS ALBERTA, 1990 - 1991

A. AGE	1990 # [1]	1990 %	1991 #	1991 %
15 - 19	3105	7.0	2089	5.4
20 - 24	7147	16.1	5819	15.1
25 - 34	16213	36.5	13810	35.8
35 - 44	9824	22.1	9198	23.8
45 - 54	5305	11.9	4900	12.7
55 +	2722	6.1	2607	6.8
Unknown	130	0.3	180	0.5
TOTAL	44446	100.0	38601	100.0

B. EXPERIENCE[2]	1990 #	1990 %	1991 #	1991 %
0 - 1 month	4201	9.5	2858	7.4
1 - 6 months	8720	19.6	6395	16.6
6 months - 1 year	4577	10.3	3499	9.1
More than 1 year	19852	44.7	18423	47.7
Unknown	7096	16.0	7426	19.2
TOTAL	44446	100.0	38601	100.0

Note:

1 Number of lost-time claims.

2 Experience refers to length of time with the current employer.

Source: Research and Information Development, AOHS; June 1992.

TABLE 5.6

DAYS LOST DUE TO OCCUPATIONAL INJURIES AND ILLNESS ALBERTA, 1990 - 1991

Days Lost[1]	1990 # [2]	1990 %	1991 # [2]	1991 %
0, Unknown	2006	4.5	2128	5.5
1 - 5	15851	35.7	13091	33.9
6 - 10	7261	16.3	5875	15.2
11 - 15	3694	8.3	3097	8.0
16 - 20	2243	5.0	1990	5.2
21 - 30	2731	6.1	2365	6.1
31 - 40	1866	4.2	1640	4.2
41 - 50	1356	3.1	1190	3.1
51 +	7438	16.7	7225	18.7
TOTAL	44446	100.0	38601	100.0

Note:

1 Days lost have been accumulated through to March 31, 1992. While some claims of 1 - 51 days and many claims in the 51 + days lost category will continue to accumulate days lost, the percent of claims in each category will not change by very much.

2 Number of lost-time claims.

Source: Research and Information Development, AOHS; June 1992.

6. ALBERTA LABOUR FORCE STATISTICS, AND WORKERS' COMPENSATION BOARD COVERAGE, 1991

Table 6.1 contains information about the employed labour force in Alberta for 1990 and 1991, as estimated by Statistics Canada and published by Alberta Bureau of Statistics. These figures show an increase of 1.2% in the employed work force from 1990 to 1991. There were small increases in the employed labour force in service (3.7%), Public Administration (3.7%), Agriculture (3.2%), and Finance (1.5%). There were small decreases in the other industry sectors.

Table 6.1 also includes estimates of the size of the Alberta work force covered by WCB. Overall, it is estimated that 75% of the employed labour force in Alberta was covered by the Workers' Compensation Board in 1991 (unchanged from 1990).

The employment figures from Statistics Canada cannot be compared directly with AOHS person-years estimates because:

a) industry definitions differ;

b) some employers within an industry do not have WCB coverage;

c) person-year estimates will be low, by comparison with Statistics Canada employment data, for industries in which there is considerable part-time employment or frequent layoffs; and

d) person-year estimates cannot be calculated for industries that do not submit payroll data to WCB.

TABLE 6.1

ALBERTA LABOUR FORCE AND WCB COVERAGE BY INDUSTRY 1990 - 1991

Industry	Employed Labour Force ('000) 1990	1991	Change (%)	WCB Coverage[1] 1991 ('000)
Service	429	445	+3.7	294
Trade	222	220	-0.9	220
Manufacturing	94	92	-2.1	92
Transport and Utilities	91	89	-2.2	89
Public Administration	80	83	+3.7	83
Agriculture	93	96	+3.2	2
Construction	83	82	-1.2	82
Primary Resource	73	72	-1.4	70
Finance	65	66	+1.5	6
TOTAL	1231	1246	+1.2%	938

Note:

1 Percent coverage estimates from 1978 WCB Historical Series were used to calculate WCB coverage for 1991.

Source: Statistics Canada Catalogue # 71-001, and the Alberta Bureau of Statistics.

APPENDIX

DEFINITION OF INDUSTRY BY S.I.C. (1960)

Forestry	03100-03904
Well drilling	09600
Well servicing	09903
Oil and gas exploration	09200-09201
Other oilfield services	06304-06306, 09400, 09900-09931 (except 09903)
Tar sands	06600-06601
Operation of gas plants and oil wells	06300, 06500
Coal mining	06100-06110
Meat and poultry packing	10100-10300
Food and beverage	10500-14700
Wood and building products	25100-27402
Printing and publishing	28600-28900
Metal products	29100-33200
Non-metallic minerals	34100-35604
Petro-chemical	35900-37903
Construction of buildings	40400-40402
Construction of roads etc.	40601-40609
Construction of utilities	40901-40912
Special trades	42100-42185
Air services	50100-50203
Railways	50600-50607
Trucking	50701-50715
Pipeline operation	51500-51508
Radio, television	54300-54301
Telecommunications	54402-54501
Electric power	57200
Gas distribution	57400
Machine sales, service	62300-62307
Warehouse, wholesale	62900-62908
Food stores	63100-63103
Department stores	64200
Automotive	65200-65810
Furniture, appliances	67601-67603
Liquor stores	69600-69601
Other retail	66300-69919 (except furniture, appliances, liquor stores)
Education	80101-80504
Hospitals	82100-82103
Care of young, old, infirm	82800-82812

Sports, entertainment	85100-85934
Business services	86100-86202, 86600-86931
Engineering services	86400-86416
Hotels, restaurants	87500-87510
Personal services	87100-87402, 87600-87906
Building maintenance	89701-89708
Government boards and agencies	93104-93115
Government of Alberta	93200
Village, town	95100-95101
Municipality, county	95102-95103
City	95104
Other local government	95105-95108

Note: These codes are modifications of S.I.C. codes, in that a 2-digit extension has been added by the WCB for their industry classification system. More details regarding what industries are included in these groupings can be obtained from Research and Information Development.